REMARKS

In this reissue application, original patent claims 1-15 remain pending. New claims 16-20 were previously added, after which claims 17-20 were cancelled. New claims 21-46 were then added.

Claims 1-16 and 21-46 were pending and stand rejected. None of the claims has been amended.

The remarks presented herein are in response to the final office action mailed February 26, 2009.

Information Disclosure Statement

On December 10, 2007, Applicant filed an Information Disclosure Statement listing references C1 through C51. In the final office action mailed February 26, 2009, Examiner crossed out references C13, C14, C20, C30, C46, and C51, stating that although copies of the crossed-out references were provided with the IDS, the copies were illegible (Detailed Action, page 2). Applicant hereby submits new copies of these references, along with another IDS listing only these references.

Rejection under 35 USC 251

Claims 16 and 21-46 were rejected under 35 USC 251 as allegedly being improperly broadened in a reissue application made and sworn to by the assignee and not the patentee (Detailed Action, page 2). Examiner and the undersigned attorney discussed this rejection over the phone on March 26, 2009. Examiner stated that Applicant did not need to respond to this rejection.

Rejection under 35 USC 103(a)

Claims 21-26, 29-30, 33-39, 42-43, and 46 were rejected under 35 USC 103(a) as allegedly being unpatentable over Alvarez in view of Auerbach. Applicant respectfully traverses. Claim 21, which has not been amended, recites:

In a system wherein a first entity and a plurality of second entities in a network are operating in a point-to-point mode, with each of said second entities connected by a point-to-point communication channel with said first entity, an automatic method for optimizing a mode of transmission of data between said plurality of second entities and said first entity, the method comprising the following steps:

a. said first entity transmitting a request message to said plurality of second entities over a multicast communication channel, said request message being used to initiate transition from said point-to-point mode to a multicast mode;

b. said first entity receiving from certain of said plurality of second entities an acknowledgment message in response to said request message, said acknowledgement message indicating that each of said certain of said plurality of entities was able to receive said request message; and

c. for each said acknowledgment message received from said certain of said plurality of second entities which indicates that said certain of said plurality of second entities can receive said request message, deactivating said point-to-point communication channel between said first entity and said certain of said plurality of second entities.

Element (a): said first entity transmitting a request message to said plurality of second entities over a multicast communication channel, said request message being used to initiate transition from said point-to-point mode to a multicast mode

Neither Alvarez nor Auerbach discloses, teaches, or suggests the claimed element "said first entity transmitting a request message to said plurality of second entities over a multicast communication channel, said request message being used to initiate transition from said point-to-point mode to a multicast mode."

Alvarez discusses time domain multiple access (TDMA) broadcasting, multipoint, and conferencing communications (title). Applicant agrees with the Examiner that Alvarez does not disclose when communicating in the multipoint mode, the first endpoint activating a multicast channel and transmitting a request message (Detailed Action, page 3). It follows that Alvarez does not disclose the claimed element "said first entity transmitting a request message to said plurality of second entities over a multicast communication channel, said request message being used to initiate transition from said point-to-point mode to a multicast mode."

(Applicant also notes that Alvarez does not discuss transitioning from point-to-point mode to multicast mode.)

Auerbach does not remedy this deficiency. Auerbach discusses routing packets through a multicast network communication system using a multicast distribution tree (abstract). Specifically, Auerbach discusses administration of the communication path that makes up the multicast distribution tree (abstract).

Claim 1 states that "a first entity and a plurality of second entities in a network are operating in a point-to-point mode, with each of said second entities connected by a point-to-point communication channel with said first entity" (emphasis added). Claim 1 also states "said first entity transmitting a request message to said plurality of second entities over a multicast communication channel, said request message being used to initiate transition from said point-to-point mode to a multicast mode" (emphasis added).

Although Auerbach discusses multicast communications, Auerbach does not disclose point-to-point communications. Auerbach describes "prior art multicast packet communications systems" (emphasis added; 2:36-37) and is explicitly related to "the management of multicast tree communication" (emphasis added; 1:28-29). Auerbach states that one object of the invention is to "provide an improved method and system for setting up multicast tree communication routes independent of the control and administration of the multicast user set itself" (emphasis added; 2:38-41) and another object is to "provide an improved system of packet communication [concerning] the administration of transmission paths in a multicast tree routing scheme" (emphasis added; 2:42-45).

Since Auerbach does not disclose point-to-point communications, it follows that Auerbach also does not disclose a first entity and a second entity operating in a point-to-point mode, let alone a request message being used to initiate transition from said point-to-point mode to a multicast mode.

It follows that Auerbach does not disclose the claimed element "said first entity transmitting a request message to said plurality of second entities over a multicast communication channel, said request message being used to initiate transition from said point-to-point mode to a multicast mode."

Thus, neither Alvarez nor Auerbach discloses, teaches, or suggests the claimed element "said first entity transmitting a request message to said plurality of second entities over a multicast communication channel, said request message being used to initiate transition from said point-to-point mode to a multicast mode."

Therefore, claim 21 is patentable over Alvarez and Auerbach, alone and in combination. Independent claims 33-34 and 46 recite similar language and are also patentable over Alvarez and Auerbach, alone and in combination, for at least the same reason.

Element (b): said first entity receiving from certain of said plurality of second entities an acknowledgment message in response to said request message, said acknowledgement message indicating that each of said certain of said plurality of entities was able to receive said request message

Neither Alvarez nor Auerbach discloses, teaches, or suggests the claimed element "said first entity receiving from certain of said plurality of second entities an acknowledgment message in response to said request message, said acknowledgement message indicating that each of said certain of said plurality of entities was able to receive said request message."

Applicant agrees with the Examiner that Alvarez does not disclose when communicating in the multipoint mode, the first endpoint receiving acknowledgements (Detailed Action, p. 3). It follows that Alvarez does not disclose the claimed element "said first entity receiving from certain of said plurality of second entities an acknowledgment message in response to said request message, said acknowledgement message indicating that each of said certain of said plurality of entities was able to receive said request message."

Auerbach does not remedy this deficiency. Examiner argues that the claimed element "acknowledgement message" corresponds to Auerbach's message that indicates whether the tree address is already in use or is available for use (Detailed Action, p. 4). Claim 21 recites "said acknowledgement message indicating that each of said certain of said plurality of entities was able to receive said request message." As explained above, Auerbach does not disclose "transmitting a request message ... being used to initiate transition from said point-to-point mode to a multicast mode." Since Auerbach does not disclose transmitting the request message, Auerbach cannot disclose an acknowledgement message that indicates that an entity was able to receive said request message.

It follows that Auerbach does not disclose the claimed element "said first entity receiving from certain of said plurality of second entities an acknowledgment message in response to said request message, said acknowledgement message indicating that each of said certain of said plurality of entities was able to receive said request message."

Thus, neither Alvarez nor Auerbach discloses, teaches, or suggests the claimed element "said first entity receiving from certain of said plurality of second entities an acknowledgment message in response to said request message, said acknowledgement message indicating that each of said certain of said plurality of entities was able to receive said request message."

Therefore, claim 21 is patentable over Alvarez and Auerbach, alone and in combination. Independent claims 33-34 and 46 recite similar language and are also patentable over Alvarez and Auerbach, alone and in combination, for at least the same reason.

Element (c): for each said acknowledgment message received from said certain of said plurality of second entities which indicates that said certain of said plurality of second entities can receive said request message, deactivating said point-to-point communication channel between said first entity and said certain of said plurality of second entities

Neither Alvarez nor Auerbach discloses, teaches, or suggests the claimed element "for each said acknowledgment message received from said certain of said plurality of second entities which indicates that said certain of said plurality of second entities can receive said request message, deactivating said point-to-point communication channel between said first entity and said certain of said plurality of second entities" (emphasis added).

Applicant agrees with the Examiner that Alvarez does not explicitly disclose the claim language "for each said acknowledgement message received ... deactivating said point-to-point communication channel between said first entity and said certain of said plurality of second entities" (Detailed Action, p. 3).

In the office action mailed October 23, 2007, Examiner argued that Alvarez implies this claim language (Detailed Action, p. 6). Specifically, Examiner stated that in Alvarez, "the import intranodal buffers are set to the same partition" (Detailed Action, p. 6). Examiner argued that setting the buffers to the same partition disables the ability of the intranodal buffers to participate in duplex communication, thereby deactivating any point-to-point communication channel (Detailed Action, p. 6).[1] (This argument will be further discussed below.)

In the response filed February 25, 2008, Applicant disagreed. Applicant explained that just because the parties share the same intranodal buffer partition does not mean that the parties cannot also use a point-to-point communication channel. Alvarez explicitly states that "both point-to-point and multipoint, broadcast and conferencing connections can be made simultaneously, both intranodally and internodally" (emphasis added; 4:22-24).

In the present office action, Examiner states that in Alvarez, "when using multicasting or conferencing transmission, all the ports are used" (emphasis added; Detailed Action, p. 6).

---

[1] Although Examiner gave no citation within Alvarez, Examiner appeared to be referring to Alvarez' description of how intranodal conferencing connections work (4:1-17). In Alvarez, when two or more parties associated with the same conference are in the same node, the parties share the same intranodal buffer partition (4:3-5).

Examiner argues that "[b]ecause all ports are occupied while using multicast, the point-to-point communication channel must be inactive during multicasting process" (Detailed Action, p. 6).

Applicant disagrees. Although Examiner gave no citation within Alvarez regarding the assertion that "all the ports are used," Examiner appears to be referring to Alvarez' description of how indirect addressing broadcast tables work (3:22-47). In Alvarez, the destination address is an indirect address that is directed to an indirect addressing broadcast table (3:23-26). A particular broadcast table indirect address will be associated with the address of all local data ports which are intended destinations for the broadcast message (3:29-32). Alvarez does not disclose using all ports. Instead, Alvarez discloses using all ports which are intended destinations for the broadcast message. If a port is not an intended destination for the broadcast message, then the port will not be used for broadcasting and may be used for other types of communications, such as point-to-point communications.

Therefore, Alvarez does not imply the claimed element "for each said acknowledgement message received ... deactivating said point-to-point communication channel between said first entity and said certain of said plurality of second entities."

Auerbach does not remedy this deficiency. Examiner argues that the claimed element "acknowledgement message" corresponds to Auerbach's message that indicates whether the tree address is already in use or is available for use (Detailed Action, p. 4). Auerbach does not disclose, teach, or suggest deactivating a point-to-point communication channel for each such message received. In fact, Auerbach does not disclose, teach, or suggest deactivating a point-to-point communication channel at all (or even point-to-point communications in the first place, as explained above).

It follows that Auerbach does not disclose the claimed element "for each said acknowledgement message received ... deactivating said point-to-point communication channel between said first entity and said certain of said plurality of second entities."

Thus, neither Alvarez nor Auerbach discloses, teaches, or suggests the claimed element "for each said acknowledgment message received from said certain of said plurality of second entities which indicates that said certain of said plurality of second entities can receive said request message, deactivating said point-to-point communication channel between said first entity and said certain of said plurality of second entities."

Therefore, claim 21 is patentable over Alvarez and Auerbach, alone and in combination. Independent claims 33-34 and 46 recite similar language and are also patentable over Alvarez and Auerbach, alone and in combination, for at least the same reason.

Recall that, in the office action mailed October 23, 2007, Examiner stated that "the import intranodal buffers are set to the same partition" and argued that setting the buffers to the same partition disables the ability of the intranodal buffers to participate in duplex communication.

In response, Applicant notes that disabling an intranodal buffer (INB) pairing is not the same thing as disabling the INB itself. Even if INB pairing is disabled, an INB can still be used by multiple parties to communicate with each other.

INB pairing is an addressing scheme optimization that enables a first local port to access information placed into an INB in the preceding switch control memory (SCM) scan by a second local port with which the first local port is communicating (19:58-64). In Alvarez, all conferees within the same conference use the same port broadcast number (69:47-48). A speaking party can be heard by all other parties (69:48-49). If multiple parties speak simultaneously, the results will be garbled (69:49-50). If multiple parties are associated with the same

conference, they must share the same INB partition (69:50-53). Therefore, INB pairing is disabled during conferences (69:53).

Although INB pairing is disabled, the shared INB partition is still active, and multiple parties (e.g., voice ports) can still communicate using the shared INB partition. However, it is necessary to assure that only the active equivalent voice port writes into the INB (69:65-67). Of the voice equivalent ports sharing the same INB partition, all but the first port encountered by the SCM during its scan will have the conditional write bit on (69:67-70:2). (When the conditional write bit is on, the associated voice equivalent port can load the INB only if that port is active (69:10-12).) As a result, the INB will be loaded with either the information byte developed by an active port or a byte developed by the first port scanned (70:2-5).

Recall that, in the office action mailed October 23, 2007, Examiner argued that setting the intranodal buffers to the same partition disables the ability of the buffers to participate in duplex communication, thereby deactivating any point-to-point communication channel.

In response, Applicant notes that duplex communication is not the same thing as point-to-point communication. Duplex communication refers to bi-directional communication. A point-to-point communication channel may or may not be duplex (i.e., may or may not support bi-directional communication). Similarly, a duplex communication channel may or may not be a point-to-point communication channel.

The claims not specifically mentioned above depend from claims 21 or 34 (directly or indirectly), which were shown to be patentable over Alvarez and Auerbach, alone and in combination. In addition, these claims recite other patentable features which further distinguish them from Alvarez and Auerbach. Thus, these claims are patentable over Alvarez and

Auerbach, alone and in combination, for at least the reasons discussed above, as well as for the patentable limitations recited therein.

Applicant respectfully submits that the pending claims are allowable over the cited art of record and requests that the Examiner allow this case. The Examiner is invited to contact the undersigned in order to advance the prosecution of this application.

Respectfully submitted,
Guy G. Riddle

Dated: April 27, 2009

By: /Sabra-Anne R. Truesdale/
Sabra-Anne R. Truesdale
Reg. No. 55,687
Fenwick & West LLP
801 California Street
Mountain View, CA 94306
Phone (650) 335-7187
Fax (650) 938-5200